Relationship between Program Outcomes and Impacts

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After this class, you will know...

- Evaluation Four Levels Model
- Formative vs Summative Evaluations
- How to use Logic Model in evaluation planning
- Differentiate between Output, outcome & impact
Evaluation

• Evaluation is the systematic collection of information about the merit, worth or significance of a program.

• Evaluation criteria:
  – Useful
  – Feasible
  – Appropriate
  – Accurate

• Ext. evaluation is used for plausible conclusions, not cause & effect!

Activity: Review handouts
Evaluation Methods

KIRKPATRICK’S FOUR LEVELS MODEL

During program activity...

• Level 1: REACTION (quantitative)
• Level 2: LEARNING (QUAN + qualitative)

Post-program evaluation...

• Level 3: BEHAVIOR (QUAL + quantitative)
• Level 4: RESULT (qualitative)
Purpose of Evaluation

Formative evaluation
- Done when the program is active
- Course correction
- Repetitive
- Flexible (mixed) designs

Summative evaluation
- Done at the end of a program
- Measure impact
- One time use
- Rigid design, expensive
WHEN & HOW DO WE EVALUATE?

Taylor-Powell & Renner, 2000

Four evaluation levels>>

REACTION

LEARNING

BEHAVIOR

RESULTS
Outputs = identify **stakeholders**, then **deliverables** from the program, i.e., activities (workshops nos.), participant nos., publications, phone call queries, new partnerships formed
What are Outcomes?

• Measure **knowledge** change that occurred after program

• Measure **attitude** change that occurred due to training

• Measure change in **skills**

• Other measures: motivation, aspirations, opinions

• Use a variety of quantitative & qualitative tests
Outcome ‘Indicators’

- Are critical questions
- Are based on program objectives
- Are used for monitoring progress
- Usually expressed as rates, percentages, efficiencies, etc.
- There should be few trackable indicators, e.g., publication usage, website usage, participation level, qualitative indicators
## GIS Team Project Outcomes 2011

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Attendees</th>
<th>Overall Workshop Quality</th>
<th>First GPS Workshop for Attendee</th>
<th>Pre/Post Test = Knowledge Change</th>
<th>Self-Learning Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomasville</td>
<td>25</td>
<td>94%</td>
<td>75%</td>
<td>74% to 92% = 18%</td>
<td>NA</td>
</tr>
<tr>
<td>Selma</td>
<td>9</td>
<td>88%</td>
<td>33%</td>
<td>76% to 96% = 20%</td>
<td>NA</td>
</tr>
<tr>
<td>Cullman</td>
<td>25</td>
<td>90%</td>
<td>65%</td>
<td>63% to 92% = 29%</td>
<td>NA</td>
</tr>
<tr>
<td>Autaugaville</td>
<td>16</td>
<td>90%</td>
<td>80%</td>
<td>76% to 92% = 16%</td>
<td>NA</td>
</tr>
<tr>
<td>Mobile</td>
<td>17</td>
<td>93%</td>
<td>NA</td>
<td>72% to 92% = 20%</td>
<td>NA</td>
</tr>
<tr>
<td>Evergreen</td>
<td>17</td>
<td>93%</td>
<td>76%</td>
<td>63% to 97% = 34%</td>
<td>NA</td>
</tr>
<tr>
<td>Livingston</td>
<td>15</td>
<td>85%</td>
<td>100%</td>
<td>NA</td>
<td>88%</td>
</tr>
<tr>
<td>Tuscaloosa</td>
<td>18</td>
<td>87%</td>
<td>68%</td>
<td>NA</td>
<td>92%</td>
</tr>
<tr>
<td>TOTALs</td>
<td>142</td>
<td>90%</td>
<td>71%</td>
<td>23%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Information source: Chris Dillard, Beau Brodbeck, Jack Rowe
Process-Output-Outcome Feedback Loops

- Logic model appears linear
- Really it is cyclical model
- Data generation > analyses > information usage > improvement
### Tracking Indicators in Feedback Loops: Alabama Vegetable IPM Program

<table>
<thead>
<tr>
<th>Outputs/Outcomes</th>
<th>Indicators</th>
<th>Data collection method</th>
<th>Findings over a 2-year period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of vegetable IPM guide on ACES Website (output)</td>
<td>Entomology website usage level IPM Guide popularity</td>
<td>Paper survey, Web stats, Google Analytics</td>
<td>20% rise in ACES website access 80% increased use of handbook</td>
</tr>
<tr>
<td>Use of social media (output)</td>
<td>Subscription level Participation in IPM contest</td>
<td>Facebook usage report, surveys Participant#</td>
<td>0 to 85 subscribers in 8 months 3 contests, 2 winners</td>
</tr>
<tr>
<td>General IPM program awareness (outcome)</td>
<td>Subscriptions to IPM newsletter, Social media</td>
<td>Subscription nos., pre-/post-tests</td>
<td>285% increase in newsletter subscription; 6 case studies of IPM adoption; $500-1000 benefit</td>
</tr>
<tr>
<td>Greater interest of farmers in vegetable IPM (outcome)</td>
<td>Participant numbers, Repeat attendance, Number of visitors at the IPM exhibits</td>
<td>Paper survey at events Observational data from exhibitions</td>
<td>22% rise in participation (winter meetings) 40% repeat attendance 50% increase in 2 years</td>
</tr>
<tr>
<td>Adoption of IPM recommendations (outcome)</td>
<td>Who is adopting what? (trends in adoption/barriers)</td>
<td>Paper survey at events, online surveys</td>
<td>Insect monitoring: 96% Trap cropping: 58% Net house vegetable: 40%</td>
</tr>
</tbody>
</table>
Report tip: Taxonomy of Outcomes

<table>
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<tr>
<th>OUTCOMES</th>
<th>WHAT TO REPORT</th>
</tr>
</thead>
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<tr>
<td>Program-centered</td>
<td>Reach, participation, publication, satisfaction</td>
</tr>
<tr>
<td>Participant-centered</td>
<td>Change in KAS, behavior, condition/status</td>
</tr>
<tr>
<td>Community-centered</td>
<td>Policy, safety, environment, economic, social</td>
</tr>
<tr>
<td>Organization-centered</td>
<td>Personnel, financial, capacity building</td>
</tr>
</tbody>
</table>

Don’t forget to write about Extension resources and personnel in external reports.